

(a) a first functional layer containing a first plastic film that is a polyolefin or an extrusion layer of a polyolefin or one or more lacquer layers, or print and lacquer layers, or print layers;

(b) a metal foil, the first plastic film is (i) in direct contact with the metal foil or (ii) in direct contact with a layer of a bonding agent that is in direct contact with the metal foil or (iii) in direct contact with a layer of a laminate adhesive that is in direct contact with the metal foil; and

(c) a second functional layer that is a second plastic film comprising a film of (i) a plastic consisting of coextruded polyamide layer/polypropylene layer where the polyamide layer is in direct contact with the polypropylene layer, and (ii) optionally at least one suitable or conventional plastic system additive in plastic (i), the polyamide lies between the metal foil and the polypropylene layer, the coextruded polyamide layer/polypropylene has a bond sufficient to prevent delamination thereof during sterilization.

31. The sterilizable composite film according to Claim 30, wherein the composite film having a layer structure, contains in sequence:

(a) the first functional layer containing the first plastic film that is a polyester;

(b) the metal foil; and

(c) the second functional layer that is the second plastic film that is the coextruded polyamide/polypropylene film.

32. The sterilizable composite film according to Claim 30, wherein the first functional layer (a) containing the first plastic film that is a polyester that is monoaxially or biaxially stretched.

33. The sterilizable composite film according to Claim 30, wherein the first functional layer (a) containing the first plastic film that is a polyester that is polyethylene terephthalate.

34. The sterilizable composite film according to Claim 30, wherein the composite film having a layer structure contains in sequence:

- (a) one or more lacquer layers, or print and lacquer layers, or print layers;
- (b) the metal foil; and
- (c) the second plastic film that is the coextruded polyamide/polypropylene

film.

35. The sterilizable composite film according to Claim 30, wherein the polyester film of layer (a) has a thickness of 8 to 25 μm , the metal foil has a thickness of 5 to 100 μm , and the coextruded polyamide/polypropylene film has a thickness of 50 to 150 μm .

36. The sterilizable composite film according to Claim 30, wherein the polyester film of layer (a) has a thickness of 10 to 18 μm , the metal foil has a thickness of 7 to 25 μm and the coextruded polyamide/polypropylene film has a thickness of 60 to 90 μm .

37. The sterilizable composite film according to Claim 30, wherein the polyester film of layer (a) has a thickness of 12 μm , the metal foil has a thickness

of 7 to 15 μm and the coextruded polyamide/polypropylene has a thickness of 70 to 80 μm .

38. The sterilizable composite film according to Claim 30, wherein the metal foil is an aluminum foil.

39. The sterilizable composite film according to Claim 30, wherein the metal foil is an aluminum foil of pure aluminum.

40. The sterilizable composite film according to Claim 30, wherein the metal foil is an aluminum foil or an aluminum alloy selected from the group consisting of AlMn, AlFeMn, AlFeSi and AlFeSiMn.

41. The sterilizable composite film according to Claim 40, wherein the aluminum alloy has a purity of 97.5 percent or higher.

42. The sterilizable composite film according to Claim 41, wherein the aluminum alloy has a purity of 98.5 percent or higher.

43. The sterilizable composite film according to Claim 30, wherein the metal foil is pretreated with a primer on one or both sides.

44. The sterilizable composite film according to Claim 30, wherein a bonding agent and/or laminate adhesive is provided between the metal foil (b) and the second functional layer (c).

45. A pouch for packaging, made from the sterilizable composite film according to Claim 30.

46. The sterilizable composite film according to Claim 30, wherein, in first functional, layer (a), the polyester is a polyalkylene terephthalate or polyalkylene isophthalate with the alkylene groups or radicals having 2 to 10 carbon atoms or

alkylene groups having 2 to 10 carbon atoms that are interrupted by at least one
-O-.

47. The sterilizable composite film according to Claim 46, wherein the polyester is polypropylene terephthalate.

48. The sterilizable composite film according to Claim 30, wherein the first functional layer (a), is a polyester, a printed image is printed on the outside of the polyester layer and a lacquer coating covers the image.

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